

This listing of the claims will replace all prior versions, and listings of claims in the application.

### **IN THE CLAIMS**

1. (Currently Amended) A system comprising: i) an implantable temperature device, which detects the body core temperature of an animal over an extended period of time, ii) a signal transceiver, iii) a processor, iv) an animal identification device attachable to a body of an animal, v) a computer readable medium comprising a database of temperature information, and vi) a remote temperature sensor, wherein said processor ~~compares~~ interprets temperature information received from said implantable temperature device and said remote temperature sensor with said database of temperature information and said animal identification device receives messages from said processor and generates a signal selected from the group consisting of an auditory signal, a visual signal, and an auditory-visual signal, wherein said signal is detectable on the outside of the body of the animal upon receipt of the message from the processor and wherein said implantable temperature device and animal identification device are configured for two-way communication with the remotely located processor.

2. (Previously presented) The system of Claim 1, wherein said implantable temperature device is implantable into said animal.

3. (Original) The system of Claim 1, wherein said implantable temperature device is implanted into an area of the animal selected from the group consisting of the vulva, eyelid, and ear of said animal.
4. (Original) The system of Claim 3, wherein said animal is a cow.
5. (Previously presented) The system of Claim 1, wherein said implantable temperature device, said signal transceiver, said processor transmit information through RFID technology.
6. (Previously presented) The system of Claim 1, wherein said processor, and said transceiver communicate with a wireless protocol.
7. (Original) The system of Claim 6, wherein said wireless protocol is Bluetooth.
8. (Original) The system of Claim 1, wherein said implantable temperature device contains a microchip comprising a unique identification number.
9. (Original) The system of Claim 1, wherein said animal identification device contains a signal device.
10. Cancelled
11. (Original) The system of Claim 1, wherein said system is used to monitor the body core temperature of a dairy cow.
12. (Currently Amended) A method of detecting temperature fluctuation in an animal comprising the steps of:
  - a) providing a temperature recording system comprising:
    - i) a signal transceiver,
    - ii) a processor,

- iii) at least one animal containing an implantable temperature device comprising a unique identification number; said at least one animal having an animal identification device attached to said animal, wherein said animal identification device is configured to receive messages from a processor and generates a signal selected from the group consisting of an auditory signal, a visual signal, and an auditory-visual signal, wherein said signal is detectable on the outside of the body of the animal upon receipt of the message from the processor and wherein said implantable temperature device and animal identification device are configured for two-way communication with a remotely located processor;
- iv) a remote temperature sensor; and
- v) a computer readable medium comprising a database of an animal, in a herd and ~~ambient~~ temperature information from said implantable temperature device and said remote temperature sensor; and;
- b) detecting body core temperature of said at least one animal with said implantable temperature device over an extended period of time;
- c) ~~comparing~~ interpreting said animal's body core temperature fluctuation over said extended period of time with said database of said temperature information and ambient temperature information from said remote temperature sensor; and
- d) identifying a particular animal having a temperature fluctuation through transmittal of message from said processor to said animal identification device

thereby causing said animal identification device to display a signal on the outside of the animal to facilitate identification of the animal in a herd.

13. (Previously Presented) The method of Claim 12, wherein said at least one animal is at least one cow.

14. Cancelled

15. Cancelled

16. Cancelled

17. Cancelled

18. (Previously presented) The method of Claim 12, further comprising the step of encoding said processor with said unique identification number for each animal.

19. (Previously presented) The method of claim 12, further comprising the step of encoding said processor with standardized animal temperature fluctuation data.

20. Cancelled

21. (New) The system of Claim 1 wherein said extended time period is at least one hour and at most less than one year.

22. (New) The system of Claim 1 wherein said body core temperature is compared over an extended period of time.

23. (New) The system of Claim 1 wherein said processor transmits a health check-up message to said animal identification device.

24. (New) The method of Claim 12 further comprising interpreting said temperature fluctuations of a particular animal over an extended period of time to determine if animal is entering estrus.

25. (New) The method of Claim 12 further comprising creating a temperature trend for a particular animal over an extended period of time.

26. (New) The method of Claim 12 further comprising comparing a particular animals temperature information with a standardized animal's temperature fluctuation information upon entry into particular health changes.